

ABSTRACT

AIM AND OBJECTIVES

To differentiate between reactive and metastatic cervical lymph nodes in the head and neck pathology by greyscale ultrasonography. To emphasize the sensitivity and specificity of greyscale ultrasonography in detecting the reactive and metastatic cervical lymph nodes. To emphasize grey scale ultrasonography as a good indicator for diagnosis and treatment planning of reactive and metastatic cervical lymph nodes.

MATERIALS AND METHODS

Total of 30 patients divided into 3 Groups. Group I consisted of 10 healthy individuals, Group II consisted of 10 patients with head and neck infections, Group III consisted of 10 patients with head and neck malignancy. Patients were subjected to clinical examination before Ultrasonography Scanning and FNAC procedure. All sonographically detectable cervical lymph nodes in each region were assessed for size, shape, border, hilum, echogenicity and intranodal necrosis. Fine needle aspiration was done in the involved cervical lymph node for histopathological evaluation under aseptic condition.

RESULTS

The sensitivity and specificity of ultrasonography in differentiating reactive cervical lymph nodes from metastatic cervical lymph nodes were for

size 86.1% and 68.8% respectively, for shape 92.2% and 86.5% respectively, for border 96% and 97 % respectively, for hilum 100% and 100% respectively, for internal echogenicity 77% and 100% respectively, for intranodal necrosis 41.2% and 100% respectively.

CONCLUSION

This study helps to differentiate the reactive cervical lymph nodes from the metastatic lymph nodes by using Greyscale Ultrasonography which was confirmed by Fine Needle Aspiration Cytology procedure. The ultrasonographic features of lymph nodes with round shape, absence of hilar echo, sharp nodal borders, hyperechoic internal echogenicity and presence of intranodal necrosis were highly suggestive of metastatic cervical lymph nodes whereas lymph nodes with oval shape, presence of hilar echo, smooth nodal borders, hypoechoic internal echogenicity and absence of intranodal necrosis were suggestive of reactive cervical lymph nodes. Thus, early diagnosis and proper treatment plan can be implemented to the patient at the earliest.

KEY WORDS

Greyscale Ultrasonography, FNAC, Metastatic cervical lymph nodes